

REMARKS/ARGUMENTS

Reconsideration of this patent application is respectfully requested in view of the foregoing amendments, and the following remarks. Claims 9-16 are in the application. Claims 1-8 have been canceled. No new matter has been added.

Applicant has re-written original claims 1-8 as new claims 9-16, to further clarify the invention. The specification has been amended to remove references to claim numbers. No new matter has been added.

The Examiner objected to the drawings, stating that the suction pipe being connected with the evaporator is not shown. Applicant has canceled this feature from claim 1, now new claim 9. The Examiner rejected claims 1 and 5 under 35 U.S.C. §112 for various informalities. Applicant submits that the new claims overcome these rejections.

Claims 1, 4, 5 and 7 were rejected under 35 U.S.C. §102(b) as being anticipated by *Nelson et al.* Claims 1, 2 and 3 were rejected under 35 U.S.C. 102(e) as being anticipated by *Lee*. Claim 6 was rejected under 35 U.S.C. §103(a) as being

unpatentable over *Nelson et al.* Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Lee*. Applicant respectfully traverses.

New claim 9 corresponds to original claim 1, and additionally recites that the compensating volume and filling volume are arranged in a way that refrigerant from the suction pipe flows into the compensating volume by passing through the filling volume. Support for this amendment can be found in the specification on page 9, second paragraph.

Nelson shows in Fig. 3 a hermetically encapsulated compressor housing (case) 11 comprising a suction muffler 65. This suction muffler 65 comprises a filling volume inside the outer wall 71. The inlet cross section is the upper end of the projection 86. According to the Examiner, the compensating volume is inside the flaring horn 88. The Examiner states that refrigerant would oscillate between suction muffler 65 and horn 88 due to the pressure difference between piston and suction pipe 96.

Applicant submits that there can be no oscillations in the compressor according to *Nelson* because when the cylinder valve is

closed, gas entering through the suction pipe would simply exhaust into the interior of the compressor housing. Otherwise, there would be no need to build the so called "direct suction" compressors where the entrance of the muffler is directly connected to the outlet of the suction pipe.

Regarding the phrase "that the inlet cross section is simultaneously the connecting port between the filling volume and the compensating volume" in the original claim 1, the Examiner sees a disclosure in the upper end of projection 86 of *Nelson* which connects the interior of the suction muffler 65 as the filling volume with the interior of horn 88 as the compensating volume.

The horn 88 does enclose the inlet cross section 86, in the sense that the horn 88 itself constitutes the inlet cross section and encloses the suction pipe 96, but only in a sense that the circumference of the horn is greater than the circumference of the suction pipe. However, the suction pipe itself does not extend into the horn.

Thus, the suction pipe 96 of *Nelson* is not "enclosed" by horn 88 because the suction pipe ends before the suction muffler

65 so that cold refrigerant coming from the evaporator and warm refrigerant coming from the interior of the compressor housing can mix. But it is exactly this mixing that is successfully prevented by the present invention.

The volume outside the projection 86 of *Nelson* could not be construed as the compensating volume, because it does not have a connection to the interior of the compressor housing, so it would not be justified to construe *Nelson* that way.

Regarding *Lee*, the Examiner states that *Lee* shows a suction muffler 400 (Fig. 4) having a filling volume in the form of the interior of channel 41, an inlet cross section in form of the channel inlet 41b and a compensating volume in form of the volume inside the casing 42. The compensating volume 42 is connected to the compressor housing 500 via hole 48. Hole 48, however, is provided for draining oil (see column 7 line 10). The suction pipe 600 leads into the interior of suction muffler 400.

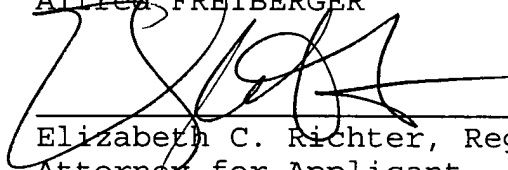
In contrast to the present invention, the refrigerant of *Lee* first passes through the alleged compensating volume (between casing 42 and channel 41) before it reaches the alleged filling volume (inside channel 41). This proves that the volume between

casing 42 and channel 41 – the alleged compensating volume – cannot provide the function of a compensating volume that is to provide an undisturbed boundary layer between warm and could refrigerant (see our description page 9 last paragraph).

None of the cited references teach or suggest a compressor in which the refrigerant flows into the compensating volume by passing through the filling volume.

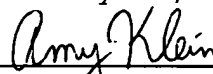
Accordingly, Applicant submits that new claims 9-16 are patentable over the cited references, taken either singly or in combination. Early allowance of the amended claims is respectfully requested.

Respectfully submitted,
Alfred FREIBERGER


Elizabeth C. Richter, Reg.No. 35,103
Attorney for Applicant

COLLARD & ROE, P.C.
1077 Northern Boulevard
Roslyn, New York 11576
(516) 365-9802

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop: Amendment, Commission for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on January 14, 2009.


Amy Klein